Claim Amendments

Claim 1 (previously presented): An apparatus for displaying an image to an observer comprising:

a display screen upon which stripes of the image appear in at least three distinct phases;

a light blocking shutter disposed in front of the display screen forming a stripe pattern which lets through only 1/3 of each stripe of the image on the display screen during each of the at least three distinct phases;

a computer connected to the display screen and the light blocking shutter which changes the phases so in each phase the stripe pattern is shifted laterally, which renders 2 3D scenes corresponding to the eyes of the observer for arbitrary observer position and orientation, which produces a proper left/right orientation pattern for each of the three phases and which interleaves the left/right orientations into three successive time phases as red, green and blue, respectively, and that continually changes the width and positions of the stripes as the observer moves; and

an eye tracker for identifying the locations of the observers' eyes and providing the location to the computer.

Claim 2 (original): An apparatus has described in Claim 1 wherein the display screen includes a rear projection screen.

Claim 3 (original): An apparatus as described in Claim 2 wherein the display screen includes a field programmable gate array in communication with the projection screen and the shutter which synchronizes the phases between the shutter and the projection screen.

Claim 4 (original): An apparatus as described in Claim 3 wherein the display screen includes a digital light processor projector in communication with the array and the projection screen which displays the three phases of images sequentially and controls the timing of the phases.

Claim 5 (original): An apparatus as described in Claim 4 wherein the display screen includes a ferroelectric liquid crystal in communication with the array, the light processor, and the projection screen which shutters the start and stop of each phase.

Claim 6 (original): An apparatus as described in Claim 5 wherein the shutter includes a pi-cell.

Claim 7 (previously presented): A method for displaying an image to an observer comprising the steps of:

identifying locations of the observer's eyes with an eye tracker;

sending the locations to a computer with the eye tracker;

rendering two 3D scenes, one for each eye for arbitrary observer position and orientation and for each of the three phases, a proper left/right alteration pattern which are interleaved into three successive time phases as red, green and blue, respectively;

displaying on a display screen stripes of the image in at least three distinct phases; and

forming a stripe pattern which lets through only 1/3 of each stripe of the image that continually changes the width and positions of the stripes as the observer moves on the

display screen during each of the at least three distinct phases with a light blocking shutter disposed in front of the screen.

Claim 8 (original): A method as described in Claim 7 wherein the forming step includes the step of encoding into 3 1-dimensional bit-maps the three phases of stripe for the light shutter, each indicating an on-off pattern for shutter micro-stripes at one of the three phases; and sending these bit-maps to a field programmable gate array of the display screen.

Claim 9 (original): A method as described in Claim 8 wherein the forming step includes the step of sending with the field programmable gate array the three bit-patterns to a pi-cell light shutter in rotating sequence.

Claim 10 (original): A method as described in Claim 9 wherein the forming step includes the step of controlling with a digital light processor projector of the display screen timing of the rotating sequence of the three-bit patterns to the pi-cell.

Claim 11 (original): A method as described in Claim 10 wherein the displaying step includes the step of displaying with the digital light processor projector the three image phases in succession.

Claim 12 (previously presented): A displayer comprising:

a sensor mechanism for identifying at least one of tilt and rotation of at least one viewer's head; and

a mechanism for displaying a plurality of images to one or more viewers wherein at least a portion of the images are a function of at least one of tilt and rotation of at least one viewer's head, said displaying mechanism in communication with the sensor mechanism, the displaying mechanism includes a computer which receives information from the sensor mechanism identifying at least one of tilt and rotation of at least one viewer's head and produces said images, the computer causes the images to be displayed.

Claim 13 (previously presented): A displayer as described in Claim 12 wherein at least one of a spacing pattern or a stripe pattern of the first image and second image varies as a function of at least one of the tilt and rotation of the at least one viewer's head.

Claim 14 (previously presented): A displayer as described in Claim 12 wherein the spacing pattern is a tapered perspective pattern.

Claim 15 (previously presented): A displayer as described in Claim 14 wherein the tapered perspective pattern is linear.

Claim 16 (previously presented): A displayer as described in Claim 12 wherein the stripe pattern is used to interleave the first and second views.

Claim 17 (previously presented): A displayer as described in Claim 16 wherein the interleaving is at least one of time and space multiplexed.

Claim 18 (previously presented): A displayer as described in Claim 12 wherein the sensor is an imaging device.

Claim 19 (previously presented): A displayer as described in Claim 12 wherein the sensor mechanism identifies viewer head tilt and head rotation.

Claim 20 (previously presented): A displayer as described in Claim 12 wherein the sensor mechanism and the display medium are connected via at least one of a network connection and an internet connection.

Claim 21 (currently amended): A displayer comprising:

a sensor mechanism for identifying where V viewers are in space, where V is greater than or equal to 1 and is an integer; and

a displaying mechanism for displaying [[V]] U different images to V different viewers where each image is a function of where each viewer is in space to which the respective image is associated, where U is greater than or equal to 1 and is an integer, said displaying mechanism remote and apart from and out of contact with the V viewers, said displaying mechanism in communication with the sensor mechanism, the displaying mechanism includes a computer which receives information from the sensor mechanism identifying where each viewer is in space and produces said images, the computer causes a first image of the [[V]] U images and a second image of the [[V]] U images associated with a first viewer of the V viewers to be shown interleaved on the first screen wherein spacing between the interleaved first image and second image varies as a function of where each viewer is in space to which the respective image is associated.